

REMARKS

Claims 1-44 are currently pending in the subject application and are presently under consideration. Claims 1-12, 14-18, 20, 22-23 and 42-43 have been amended as shown on pp. 2-9 of the Reply.

Applicants' representative thanks the Examiner's Supervisor for the courtesies extended during the teleconference of August 21, 2007.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 1-44 Under 35 U.S.C. §112, second paragraph

Claims 1-44 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-44 have been amended to correct any deficiencies related to this rejection, as such the rejection is moot and should be withdrawn.

II. Rejection of Claims 1-44 Under 35 U.S.C. §102(e)

Claims 1-44 stand rejected under 35 U.S.C. §102(e) as being taught by Pardikar *et al.* (USPGPUB 2004/0236777). It is respectfully requested that this rejection should be withdrawn for at least the following reasons. Pardikar *et al.* does not teach or suggest each and every element as set forth in the subject claims.

A single prior art reference anticipates a patent claim only if it expressly or inherently describes each and every limitation set forth in the patent claim. *Trintec Industries, Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 63 USPQ2d 1597 (Fed. Cir. 2002); *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the ... claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

The claimed subject matter relates to a novel client side caching (CSC) infrastructure which facilitates a seamless operation across connectivity states (*e.g.*,

online-offline) between client and remote server. More specifically, a persistent caching architecture is employed to safeguard the user (*e.g.*, client) and/or the client applications across connectivity interruptions and/or bandwidth changes. This is accomplished in part by caching the desirable file(s) together with the appropriate protocol information to a local data store.

In particular, independent claim 1 recites a remote file system that promotes truth on a client, comprising: *one or more client computers that operatively communicate with an online remote location to work on one or more file objects; a caching component that selectively caches the one or more file objects to a local cache located on a respective client computer, thereby making it available to the client when disconnected from remote location; and a component that resolves conflicts between a client version of the one or more file objects and a remote location version of the one or more file objects such that the client version overrides the remote location version when viewed on the client; wherein modifications by the client while disconnected from the remote location are stored to the client's memory and then automatically uploaded to the remote location when the client regains connection to the remote location; and wherein transitioning online to the remote location is initiated by the caching component which periodically scans offline paths and then initiates an online transition when a path becomes reachable.* Pardikar *et al.* does not expressly or inherently disclose the aforementioned novel aspects of applicants' claimed subject matter as recited in the subject claims.

Pardikar *et al.* discloses a system and method for improved client-side caching that transparently caches suitable network files for offline use. A cache mechanism in a network redirector transparently intercepts requests to access server files, and if the requested file is locally cached, satisfies the request from the cache when possible. For files existing locally, local and remote timestamps may also be compared to ensure that the local file is current. Otherwise the cache mechanism creates a local cache file and satisfies the request from the server, and also fills in sparse cached files as reads for data in ranges that are missing in the cached file are requested and received from the server. (See pg. 1, paragraph [0004]).

In contrast, applicants' claimed subject matter discloses a remote file system that promotes truth on a client. One or more client computers communicate with an online

remote location to work on file objects. A caching component caches the file objects to a local cache located on a respective client computer, thereby making it available to the client when disconnected from the remote location. Then, transitioning to online is initiated by the caching component as the result of discovering that a path has become reachable. The caching component periodically scans the paths that are offline. A network arrival event can also trigger the caching component to transition the paths. Once the caching component detects a path can be reachable, it sends an IOCTL (I/O control) to a CSC driver to initiate an online transition on this path. The CSC driver simply resets the state of the directory on the transition list and increases the version number. All the existing handles still remain offline until the handle is backpatched individually.

The caching component completes the pending directory change notification on these handles so that the application can send a new directory enumeration to see the online view. To maintain the consistent view of the directory after transitioning online and before outbound synchronization completes, the caching component can merge the results from the server with the results from the cache, such as add, remove, or modify entries on the enumeration buffer depending on the cache files. The namespace as seen by the user is a union of the namespace as it exists on the server and as it exists in the offline store. This ensures that the applications, and hence, the user retains a consistent view of the files after transitioning online automatically, such as file sizes and time stamps, even when the files have been modified locally but the changes have not been pushed out. (See pg. 24, lines 1-26).

Pardikar *et al.* merely discloses creating a new file on the server for each file created offline. Further, files marked as modified files are not combined, but rather the user is provided with choices comprising: keep the offline copy, keep the server copy or save the offline copy under a new name. (See pg. 6, paragraph [0046]). Applicants' claimed system automatically uploads modifications made by the client, once the client regains connection to the remote location. This is opposed to Pardikar *et al.*, in which a user manually chooses whether to keep the offline copy or keep the remote server copy. Accordingly, Pardikar *et al.* does not expressly or inherently disclose a system ...

wherein modifications by the client while disconnected from the remote location are

stored to the client's memory and then automatically uploaded to the remote location when the client regains connection to the remote location; and wherein transitioning online to the remote location is initiated by the caching component which periodically scans offline paths and then initiates an online transition when a path becomes reachable.

In view of at least the above, it is readily apparent that Pardikar *et al.* fails to expressly or inherently disclose applicants' claimed subject matter as recited in independent claims 1, 23, 42 and 43 (and claims 2-22, 24-41 and 44 which respectively depend there from). Accordingly, it is respectfully requested that these claims be deemed allowable.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP528US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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